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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/665,178	09/19/2000	David Gilbert	462-99-012	1901

128 7590 03/15/2005

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EXAMINER

NGUYEN, HUY D

ART UNIT PAPER NUMBER

2681

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/665,178	Applicant(s) GILBERT, DAVID	
	Examiner Huy D Nguyen	Art Unit 2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 and 37-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8, 12, 18, 26, 34 and 41 is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-11, 13-15, 17, 19-23, 25, 27-31, 33, 35-38, 40 is/are rejected.
- 7) ☒ Claim(s) 16, 24, 32 and 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 4-7, 13, 19-20, 22-23, 27-28, 30-31 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Coberfin et al. (U.S. Patent No. 6,269,243) in view of Zicker (U.S. Patent No. 5,995,833).

Regarding claims 1, 13, 19, 27, Coberfin et al. teaches an on-board base station (e.g., transponder 4, figure 2), comprising: an interface device (e.g., antenna 3, figures 1 & 2) on board an aircraft that interfaces with a separate wireless phone of a user inside the aircraft and with a wireless bearer system (figure 1), and a controller (e.g., means of authority 5, column 4, line 30) that controls RF emissions of the separate wireless phone to maintain the RF emissions below a predetermined level (e.g., interference level, column 4, lines 17-36). Or in the alternative, Zicker teaches a controller (e.g., controller 44, column 6, line 17) that controls RF emissions of the separate wireless phone to maintain the RF emissions below a predetermined level (e.g., minimal power level, column 6, lines 26-31).

Regarding claims 2, 5, 20, 23, 28, 31, Coberfin et al. teaches an on-board base station according to Claim 1, wherein the wireless bearer system is a SATCOM system (e.g., system S, figure 1), wherein said interface device receives signals from and transmits signals to the separate wireless phone and receives signals from and transmits signals to the SATCOM system,

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and wherein said controller controls said interface device to maintain the RF emissions of the separate wireless phone below a predetermined level (figure 1, column 3, lines 46-48, column 4, lines 17-36).

Regarding claims 4, 22, 30, Coberfin et al. teaches an on-board base station according to Claim 1, wherein the predetermined level is a level above which RF emissions will interfere with aircraft systems (column 4, lines 17-36).

Regarding claims 6-7, Coberfin et al. teaches an on-board base station according to Claim 1, further comprising: an antenna in a cabin of the aircraft that receives output signals from the separate wireless phone and conveys the output signals to said interface device (figure 1, column 3, line 66 to column 4, line 2).

3. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corbefin et al. (U.S. Patent No. 6,269,243).

Regarding claims 10-11, Corbefin et al. teaches the claimed invention except that said interface device is a microcell. However, it would have been an obvious matter of design choice to have interface device being a microcell since it does not solve any particular problem and the invention would perform equally well regardless of type of interface.

4. Claims 3, 14-15, 21, 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corbefin et al. (U.S. Patent No. 6,269,243) in view of Zicker (U.S. Patent No. 5,995,833).

Regarding claims 3, 14-15, 21, 29, Corbefin et al. does not teach registering the wireless phone as a roaming subscriber through the SATCOM system to a cellular network and then with

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a public switched telephone network. Zicker teaches registering the wireless phone as a roaming subscriber through the SATCOM system to a cellular network and then with a public switched telephone network (Fig. 1; col. 8, line 66 – col. 9, line 22) for system validation and establishing roaming mode (col. 9, line 18). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Zicker to the teaching of Corbfin et al. for system validation and establishing roaming mode.

5. Claims 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corbfin et al. (U.S. Patent No. 6,269,243) in view of Zicker (U.S. Patent No. 5,995,833).

Regarding claims 37-38, Corbfin et al. teaches the claimed invention except registering the wireless phone as a roaming subscriber through the SATCOM system to a cellular network and then with a public switched telephone network. Zicker teaches registering the wireless phone as a roaming subscriber through the SATCOM system to a cellular network and then with a public switched telephone network (Fig. 1; col. 8, line 66 – col. 9, line 22) for system validation and establishing roaming mode (col. 9, line 18). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Zicker to the teaching of Corbfin et al. for system validation and establishing roaming mode.

6. Claims 9, 17, 25, 33, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corbfin et al. (U.S. Patent No. 6,269,243) in view of Ray et al. (U.S. Patent No. 6,108,539).

Regarding claims 9, 17, 25, 33, 40, Corbfin et al. teaches the claimed invention except direct communication between the wireless phone and the cellular system when the aircraft is on

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the ground. Ray et al. teach a multidimensional cellular mobile telecommunication system that can communicate with both ground-based and non-terrestrial mobile subscriber stations (col. 3, lines 25-54). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Ray et al. to the teaching of Corbefein et al. to extend the usage of existing cellular mobile network to non-terrestrial mobile subscribers as taught by Ray et al. (col. 3, lines 49-52).

Allowable Subject Matter

7. Claim 8 has been rewritten as an independent form including all of the limitations of the base claim. Therefore, claim 8 now is allowable with the same reason set forth in the previous office action (paper dated 6/30/2004).

Claims 12, 18, 26, 34, 41 were allowed previously with the reason set forth in the previous office action (paper dated 6/30/2004).

Claims 16, 24, 32, 39 were previously objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy D Nguyen whose telephone number is 703-305-3283. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 703-306-0003. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HN

Huy Nguyen

3/8/2005

JEAN GELIN
PRIMARY EXAMINER

Jean Allard Gelin